

	<i>Mandible.</i>	
	ft.	in.
Length of ramus . . . . .	2	9·75
"    of symphysis . . . . .		7·25
Vertical height of ramus at coronoid process . . . . .		6·83
Apex of mandible projecting beyond apex of rostrum . . . . .		1·75
Mandibular tooth, length . . . . .		2·85
"    "    breadth, greatest . . . . .		0·61

2. Remarks upon Dr. von Haast's Communication on *Ziphius novæ-zealandiæ*. By Professor FLOWER, F.R.S.

[Received June 5, 1876.]

I have to make the following remarks upon Dr. v. Haast's communication which has just been read to the meeting.

1. It should be stated that Dr. von Haast in his MS., which he submitted to me, has followed Dr. Gray in using the generic name *Epiodon* for the animal described; but I have taken the liberty of substituting the Cuvierian epithet *Ziphius*. With reference to the revival of the former name, I fully agree with the following remarks of Fischer\*:—

"M. Gray considère l'*Epiodon urganantus* de Rafinesque † comme le type de *Ziphius cavirostris*. L'*Epiodon urganantus* est, pour Desmarest, son *Delphinus epiodon*; et voici les caractères qui lui sont attribués par Rafinesque.

'Corps oblong, atténué postérieurement; mâchoire inférieure plus courte que la supérieure; plusieurs dents obtuses, égales à celle-ci; aucune à la première; pas de nageoire dorsale.

'Habite la mer de Sicile.'

"Comme on le voit, le genre *Epiodon* et l'espèce *urganantus* sont plus que brièvement décrits; je pense qu'il est absolument impossible de les reconnaître, et qu'il serait sage de laisser reposer en paix les diagnoses de Rafinesque; on ne doit pas accorder de notoriété scientifique à de pareils travaux."

If, therefore, *Epiodon* is to be used for the present form, the almost universally received and well-characterized *Ziphius* ‡ would have to be discarded from zoology, as it cannot be with any reason or propriety transferred, as Dr. Gray has done, to another and very distinct genus (*Mesoplodon*, Gervais). It must be retained for *Ziphius cavirostris* and its allies, or given up altogether.

2. I do not see that Dr. v. Haast has given any grounds for distinction between his *Z. novæ-zealandiæ* and the previously described

\* "Mémoire sur les Cétacés du genre *Ziphius*, Cuvier," Nouv. Arch. du Muséum, tome iii. p. 42.

† 'Précis des découvertes et travaux somiologiques,' &c., p. 13 (Palermo 1814).

‡ Cuvier, 'Ossemens fossiles,' 2nd edit. vol. v. 1824.

*Z. chathamensis* (Hector) from the same seas\*. Indeed, so far as can be judged from the description and photographs, the two specimens attributed to the former differ more from each other than does either of them from *Z. chathamensis*, especially if, as Dr. v. Haast himself suggests, the difference in the size of the teeth is a sexual character.

3. The photographs sent by Dr. v. Haast of *Z. novæ-zealandiæ*, when compared with the specimen of *Z. indicus*, Van Beneden (*Petrorhynchus capensis*, Gray), at the British Museum, do not show any greater differences than are consistent with the range of individual variation.

4. The differences between the last-named species, or supposed species, and *Z. cavirostris*, Cuvier, and *Z. australis*, Burmeister, have never been clearly defined; no proof has therefore yet been given of the existence of more than one species of the genus.

5. Dr. v. Haast's specimen differs from all other known skeletons in having but nine ribs instead of ten. But it is not improbable that the last pair (often rudimentary and unattached to the vertebral column) may have been lost during the preparation. This appears more likely, because the ninth rib (as shown in the photograph) is larger than the last rib usually is in these animals, and the transverse process of the supposed first lumbar vertebra appears somewhat dilated at the end. Moreover the presence of one pair of ribs more or less is often only an individual character in the Cetaceans.

6. A more serious difference consists in the absence of the dorsal fin (hitherto met with in all members of the genus examined); but it must be noted that this is not Dr. v. Haast's own observation, and was made after "nearly all the blubber had been taken off."

3. Notes on *Mesoplodon floweri*. By JULIUS VON HAAST, Ph.D., F.R.S, Director of the Canterbury Museum, New Zealand.

[Received May 5, 1876.]

(Plates XLV. & XLVI.)

In the beginning of April 1874, the information reached me that a Whale about 18 feet long had been stranded on the sea-beach near Saltwater creek, about 30 miles north of Banks Peninsula; and although I did not lose any time in securing the skeleton for the Canterbury Museum, I was too late to obtain the necessary information as to form, colour, position of fins, etc., the animal having in the mean time been stripped in order to obtain the blubber.

Fortunately, however, no bone was lost; and on examination the animal proved to be a *Mesoplodon*, closely allied to a specimen obtained at the Cape of Good Hope, of which the skull has been described and figured by Dr. Gray, P. Z. S. 1865, p. 358, and subse-

\* Trans. New-Zealand Institute, vol. v. p. 164, pl. iv. (1873).